

Amendments to the Specification

Please amend the above-identified application, as follows.

Delete the title and replace the title with the following new title.

METHOD AND SYSTEM TO IMPROVE USAGE OF AN
INSTRUCTION WINDOW BUFFER IN MULTI-PROCESSOR,
PARALLEL PROCESSING ENVIRONMENTS

Amend the Abstract of the Disclosure paragraph as follows:

The present invention relates to ~~storage devices in computer systems and in particular, it~~
~~relates to an improved~~ a method and system for ~~efficiently operating buffer memories~~
determining the status of each entry in an instruction window buffer in multi-processor, parallel
processing environments. ~~A considerable performance gain can be achieved by autonomous~~
~~determination of relevant status information by the respective entry itself. This is done with~~
~~combinatorial logic, preferably. A simple~~ combinatorial circuit, which automatically generates
active instruction window status information, is added to the buffer itself. This status
information is used by a ~~as required for the~~ plurality of processes like renaming registers[[,]] and
issuing and committing instructions as an output associated with a respective buffer entry.